

Listing of Claims:

1. (Currently Amended) A drive control method ~~of~~ for a photosensor array including a plurality of rows, each having a plurality of photosensors arranged to form a matrix, the method comprising a driving sequence which includes:

5 ~~a first step for~~ applying a reset pulse to a predetermined row of ~~said the~~ photosensor array ~~so as~~ to initialize the ~~plural~~ plurality of photosensors in ~~said the~~ row;

accumulating charges generated by light irradiation during a charge accumulation period;

10 applying a predetermined pre-charge pulse to the plurality of photosensors during a pre-charge operation; and

~~a second step of~~ applying a read pulse to the ~~plural~~ plurality of photosensors of ~~said the~~ row after completion of ~~said the~~ initialization, after ~~a the~~ charge accumulating period
15 ~~for accumulating charges generated by light irradiation, and~~
 ~~after a the~~ pre-charge operation ~~in which a predetermined~~
 ~~pre-charge pulse is applied to said plurality of photosensors, to~~
 output ~~the a~~ voltage generated by the charges accumulated during ~~said the~~ charge accumulating period as an output voltage; [[,]]

20 wherein ~~the~~ timings of applying the reset pulse, the pre-charge pulse and the read pulse ~~for to~~ each row are set not to overlap in time with each other, ~~and~~ the charge accumulating

periods for the rows are set to have a period equal to one of
an application time and an integer multiple of the application
25 time of the read pulse for each row, and the charge accumulating
periods have an overlapping period between at least two
different rows.

03
2. (Currently Amended) The drive control method for a
photosensor system according to claim 1, wherein ~~said the~~ reset
pulses are successively applied to the rows of the photosensor
array ~~in said first step so as~~ to successively initialize ~~said~~
5 the plurality of photosensors, and

wherein the read pulses are successively applied to ~~said the~~
plurality of photosensors ~~in said second step~~ after ~~said the~~
initialization, after ~~a predetermined~~ the charge accumulating
period and after completion of the pre-charge operation,
10 ~~performed by said pre-charge pulse~~ to output successively the
voltages generated by the charges accumulated during ~~said the~~
charge accumulating period as the output voltages.

3. (Currently Amended) The drive control method for a
photosensor system according to claim 2, wherein ~~the applying an~~
application period of ~~said the~~ pre-charge pulse and ~~said the~~ read
pulse for each row ~~in said second step~~ is equal to or longer than

~~the~~ a sum of ~~the~~ a pulse width of the pre-charge pulse and ~~the~~ a pulse width of the read pulse.

Q3 5 4. (Currently Amended) The drive control method for a photosensor system according to claim 2, wherein ~~the applying an application~~ period of ~~said the~~ reset pulse for each row ~~in said first step~~ and ~~the applying an application~~ period of ~~said the~~ pre-charge pulse and ~~said the~~ read pulse for each row ~~in said second step~~ is are equal to or longer than ~~the~~ a sum of ~~the~~ a pulse width of the pre-charge pulse and ~~the~~ a pulse width of the read pulse.

5 5. (Currently Amended) The drive control method for a photosensor system according to claim 2, wherein ~~the applying an application~~ period of ~~said the~~ reset pulse for each row ~~in said first step~~ and ~~the applying an application~~ period of ~~said the~~ pre-charge pulse and ~~said the~~ read pulse for each row ~~in said second step~~ is are equal to or longer than ~~the~~ a sum of ~~the~~ a pulse width of the reset pulse ~~in the first step~~, ~~the~~ a pulse width of the pre-charge pulse and ~~the~~ a pulse width of the read pulse ~~in said second step~~.

Claim 6 (Canceled).

Q3
7. (Currently Amended) The drive control method for a
photosensor system according to claim 1, wherein each of ~~said~~
~~photosensor~~ the photosensors comprises a source electrode and a
drain electrode arranged with a channel region ~~consisting of~~
5 comprising a semiconductor layer interposed therebetween, and a
first electrode and a second electrode formed at least above and
below ~~said the~~ the channel region with insulating layers interposed
therebetween, and wherein the charges are generated and
accumulated in an amount corresponding to ~~the~~ an amount of light
10 irradiating ~~said the~~ the channel region.

8. (Currently Amended) The drive control method for a
photosensor system according to claim 7, wherein ~~said the~~ the reset
pulse is applied to ~~said the~~ the first electrode of ~~said the~~ the
photosensor ~~in said first step~~ to initialize ~~said the~~ the
5 photosensor; and

~~said the~~ the pre-charge pulse is applied to ~~said the~~ the drain
electrode of the photosensor ~~in the second step~~, and ~~said the~~ the
read pulse is applied to ~~said the~~ the second electrode of the
photosensor after completion of the pre-charge operation
10 ~~performed by application of the pre-charge pulse to output the a~~
voltage of the drain electrode as ~~an~~ the output voltage.

9. (Currently Amended) The drive control method for a
photosensor system according to claim 1, wherein ~~the applying an~~
application period of ~~said the~~ pre-charge pulse for each row and
~~said the~~ read pulse ~~in said second step~~ is equal to or an integer
5 number times as long as ~~the~~ a sum of ~~the~~ a pulse width of the
pre-charge pulse and ~~the~~ a pulse width of the read pulse ~~in said~~
~~second step~~.

Q3 10. (Currently Amended) The drive control method for a
photosensor system according to claim 9, wherein ~~said the~~ charge
accumulating periods for the rows ~~in said second step~~ are equal
to or an integer number times as long as said sum and are set
5 different from each other depending on the rows.

11. (Currently Amended) The drive control method for a
photosensor system according to claim 9, wherein ~~said the~~ reset
pulses are simultaneously applied to the rows of ~~said the~~
photosensor array ~~in said first step, and said the~~ pre-charge
5 pulses are applied ~~in said second step~~ at the time interval equal
to or an integer number times as long as said sum, and ~~said the~~
read pulses are applied to each row, and wherein the charge
accumulating period for each row is set to a different time.

12. (Currently Amended) The drive control method for a
photosensor system according to claim 9, wherein ~~said the~~ reset
pulses are applied ~~in said first step~~ to each row of ~~said the~~
photosensor array at the time interval equal to or an integer
5 number times as long as said sum and, after completion of the
reset pulse application to all the rows, ~~said the~~ pre-charge
pulses are applied ~~in said second step~~ and the read pulses are
applied to each row in ~~the~~ an order opposite to ~~the~~ an order of
applying the reset pulses to each row of the photosensor array ~~in~~
10 ~~the first step~~.

13. (Currently Amended) The drive control method for a
photosensor system according to claim 9, wherein ~~said the~~ reset
pulses are successively applied ~~in said first step~~ to each row of
~~said the~~ photosensor array at the time interval equal to or an
5 integer number times as long as said sum;

wherein ~~said the~~ pre-charge pulses are applied ~~in said~~
~~second step~~ in synchronism with the application of the reset
charges ~~said first step~~, and the read pulses are applied to each
row in ~~the~~ an order opposite to ~~the~~ an order of applying the
10 reset pulses to each row of the photosensor array ~~in the first~~
~~step~~; and

Q³ wherein after completion of ~~the~~ a pre-charge voltage application and the read pulse application, and after a lapse of time equal to said sum ~~of time~~, ~~said~~ the pre-charge pulses are applied and the read pulse is applied again to each row in ~~the~~ an order equal to the order of applying the read pulse to each row at the time interval equal to or an integer number times as long as said sum ~~of time~~.
